

## Claims

1. Radioimmunoconjugate comprising an alpha-emitting radionuclide bound to a monoclonal antibody, **characterised in that** said monoclonal antibody is C595.
2. Radioimmunoconjugate according to claim 1, characterised in that said  
5 alpha-emitting radionuclide is selected from the group comprising: Tb-149, At-211, Bi-212, Bi-213 and Ac-225.
3. Radioimmunoconjugate according to claim 2, characterised in that said alpha-emitting radionuclide is Bi-213 or Tb-149.
4. Radioimmunoconjugate according to claim 2, characterised in that said  
10 alpha-emitting radionuclide is Ac-225.
5. Radioimmunoconjugate according to any one of the preceding claims, characterised in that said alpha-emitting radionuclide is bound to said monoclonal antibody by a chelating agent.
6. Radioimmunoconjugate according to claim 5, characterised in that said  
15 chelating agent is DOTA, cDTPA, DTPA-CHX-A or TETA.
7. Method for manufacturing a radioimmunoconjugate, wherein an alpha-emitting radioisotope is bound to a monoclonal antibody, characterized in that said monoclonal antibody is C595.
8. Radiopharmaceutical comprising a radioimmunoconjugate according to any  
20 one of claims 1 to 6.
9. Radiopharmaceutical according to claim 8, comprising a pharmaceutically acceptable carrier and/or diluent and/or excipient.
10. Use of a radioconjugate according to any one of claims 1 to 6 for the manufacture of a radiopharmaceutical.
- 25 11. Use of a radioconjugate according to any one of claims 1 to 6 for the manufacture of a radiopharmaceutical for cancer therapy.

12. Use of a radioconjugate according to any one of claims 1 to 6 for the manufacture of a radiopharmaceutical for adjunctive cancer therapy, in particular for early stage metastatic cancer or cancer at the minimum residual disease stage.
- 5 13. Use of a radioconjugate according to any one of claims 1 to 6 for the manufacture of a radiopharmaceutical for the treatment of breast, prostate, ovarian and/or pancreatic cancer.
14. Method of treatment of a mammal affected by a cancer which comprises administering to said mammal a therapeutically effective amount of the radiopharmaceutical according to claim 8 or 9.
- 10 15. Method according to claim 14, wherein said cancer is one of breast, prostate, ovarian and pancreatic cancer.
16. Method according to claim 14 or 15, wherein said radiopharmaceutical is administered as an adjunctive therapeutic treatment.
- 15 17. Method according to claim 14, 15 or 16, wherein said radiopharmaceutical is administered directly after removal of a primary tumour.
18. Method according to claim 14, 15 or 16, wherein said radiopharmaceutical is administered upon detection of regions of tumour cells at the preangiogenic stage.
- 20 19. Method according to claim 14, 15 or 16, wherein said radiopharmaceutical is administered upon diagnosis of high risk factors in said mammal.
20. Method according to claim 14, 15 or 16, wherein said radiopharmaceutical is administered upon detection of certain cancer proteins in serum.